

**Amendments to the Claims:**

This listing of claims replaces all prior versions of the claims in the application:

Claims 1-55 (canceled).

Claim 56 (currently amended): A hydrogel foam formed by polymerization of a monomer solution containing at least one ~~ethylenically-unsaturated~~ hydrophilic olefin monomer and a multi-olefinic crosslinking agent in the presence of an inorganic carbonate blowing agent under foaming conditions effective to produce ~~a porous polymer network, which network has an average pore size of 10  $\mu$ m to 3000  $\mu$ m~~ said hydrogel foam, which is able to absorb more than 100 times its weight of aqueous solution.

Claim 57 (currently amended): The hydrogel foam of claim 56, wherein the ~~ratio of~~ multi-olefinic crosslinking agent ~~to ethylenically-unsaturated monomer is in the range of 0.01:100 to 10:100~~ is present in the monomer solution in an amount of about 0.1% to about 10% by weight.

Claim 58 (currently amended): The hydrogel foam of claim 56, wherein the at least one ~~ethylenically-unsaturated~~ hydrophilic

olefin monomer is selected from the group consisting of ~~(meth)acrylic acid, salts of (meth)acrylic acid, esters of (meth)acrylic acid, salts and acids of esters of (meth)acrylic acid, amides of (meth)acrylic acid, N-alkyl amides of (meth)acrylic acid, salts and acids of N-alkyl amides of (meth)acrylic acid, N-vinyl pyrrolidinone, acrylamide, acrylamide derivatives, methacrylamide, methacrylamide derivatives, and mixtures thereof~~ lower alkyl (meth)acrylates, lower alkoxy lower alkyl (meth)acrylates, and heterocyclic polymerizable compounds containing a carbonyl functionality adjacent to the nitrogen in the heterocyclic ring, and hydroxyl, keto, and amino derivatives thereof.

Claim 59 (currently amended): The hydrogel foam of claim 56, wherein the at least one ~~ethylenically-unsaturated~~ hydrophilic olefin monomer is selected from the group consisting of acrylamide (AM), ~~N-isopropylacrylamide (NIPAM),~~ 2-hydroxyethyl methacrylate (HEMA), 2-hydroxypropyl methacrylate (HPMA), N-vinyl pyrrolidinone (VP), N-vinyl-2-piperidone, N-vinyl-ε-caprolactam, N-vinyl imidazolidones, N-vinyl succinimide, N-vinyl diglycolylimide, N-vinyl glutarimide, N-vinyl-3-morpholinone, N-vinyl-5-methyl-3-morpholinone, acrylic acid (AA), 2-hydroxy ethyl acrylate, diethylene glycol monoacrylate, diethylene glycol monomethacrylate, 2-hydroxy propyl acrylate,

3-hydroxy propyl acrylate, 3-hydroxy propyl methacrylate,  
dipropylene glycol monomethacrylate, 2-acrylamide-2-methyl-1-  
propanesulfonic acid (AMPS), 3-sulfopropyl acrylate potassium  
salt (SPAK), 2-(acryloyloxy)ethyltrimethyl-ammonium methyl  
sulfate (ATMS), inorganic salts thereof, and mixtures thereof.

Claim 60 (currently amended): The hydrogel foam of claim 56,  
wherein the crosslinking agent is selected from the group  
consisting of N,N'-methylene-bisacrylamide, ethylene glycol  
di(meth)acrylate, ~~piperazine diacrylamide, glutaraldehyde,~~  
~~epichlorohydrin, crosslinking agents containing 1,2-diol~~  
~~structures, crosslinking agents containing functionalized~~  
~~peptides, and crosslinking agents containing proteins~~ diallyl  
phthalate, diallyl isophthalate, diallyl benzene, divinyl  
pyridine, biodegradable proteins or carbohydrate functionalized  
by covalent coupling with compounds bearing pendent alkenyl  
groups, 1,2-butylene dimethacrylate, 1,3-butylene  
dimethacrylate, 1,4-butylene dimethacrylate, propylene glycol  
diacrylate, propylene glycol dimethacrylate, diethylene glycol  
dimethacrylate, dipropylene glycol dimethacrylate, diethylene  
glycol diacrylate, dipropylene glycol diacrylate, tetraethylene  
glycol dimethacrylate, glycidyl acrylate, glycidyl crotonate,  
divinyl benzene, divinyl toluene, diallyl tartrate, allyl  
pyruvate, allyl maleate, divinyl tartrate, triallyl melamine,

N,N'-methylene bisacrylamide, glycerine trimethacrylate, diallyl maleate, divinyl ether, diallyl monoethylene glycol citrate, ethylene glycol vinyl allyl citrate, allyl vinyl maleate, diallyl itaconate, ethylene glycol diester of itaconic acid, divinyl sulfone, hexahydro-1,3,5-triacryltriazine, triallyl phosphite, diallyl ester of benzene phosphonic acid, polyester of maleic anhydride with triethylene glycol, polyallyl glucose, such as triallyl glucose, polyallyl sucrose, such as pentaallyl sucrose, sucrose diacrylate, glucose dimethacrylate, pentaerythritol tetraacrylate, sorbitol dimethacrylate, diallyl aconitrate, divinyl citraconate, diallyl fumarate, and glycidyl methacrylate.

Claim 61 (currently amended): The hydrogel foam of claim 56, which has a swelling ratio ~~in the range of 2 to 1,000~~ of at least 15 within one hour of contact with aqueous solution.

Claim 62 (canceled)

Claim 63 (currently amended): The hydrogel foam of claim 56, which ~~has a swelling time in the range of 10 seconds to 10 hours for a sample having a size in the range of 0.01 cm<sup>3</sup> and larger~~ reaches 70% of equilibrium swelling within 30 minutes.

Claim 64 (withdrawn): A method for treating a disease or disorder in a human or animal patient, said method comprising introducing onto or into the body of said patient a quantity of a hydrogel material comprising a crosslinked polymer, which hydrogel material has an average pore size of 10  $\mu\text{m}$  to 3000  $\mu\text{m}$ .

Claim 65 (withdrawn): The method of claim 64, wherein said hydrogel material further comprises particles of a disintegrant disposed within said crosslinked polymer.

Claim 66 (withdrawn): The method of claim 65, wherein said disintegrant is at least one of (i) a crosslinked natural or synthetic polyelectrolyte, (ii) a crosslinked neutral hydrophilic polymer, (iii) a non-crosslinked natural or synthetic polyelectrolyte having a particulate shape, (iv) a non-crosslinked neutral hydrophilic polymer having a particulate shape, or (v) a porous inorganic material that provides wicking by capillary forces.

Claim 67 (withdrawn): The method of claim 64, wherein said hydrogel material further comprises an effective amount of a therapeutic agent.

Claim 68 (withdrawn): The method of claim 64, wherein said hydrogel material is introduced into a bleeding site to thereby control bleeding.

Claim 69 (withdrawn): The method of claim 64, wherein said hydrogel material is introduced into the stomach to thereby control appetite.

Claim 70 (withdrawn): The method of claim 64, wherein the hydrogel material forms at least a portion of an artificial body part that is introduced into the body, said artificial body part being selected from the group consisting of artificial pancreas, artificial cornea, artificial skin, and artificial articular cartilage.

Claim 71 (withdrawn): The method of claim 64, wherein the hydrogel material is introduced into a sub-mammary incision to thereby afford breast augmentation.

Claim 72 (withdrawn): The method of claim 64, wherein the hydrogel material is introduced into or onto the body as a tissue engineering substrate.

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Claim 73 (withdrawn): The method of claim 64, wherein the hydrogel material is applied to a burn site as part of a burn dressing.

Claim 74 (new): The hydrogel foam of claim 56, further comprising a particulate filler in an amount up to 10% by weight of the foam.